

WEST

Search Results - Record(s) 1 through 50 of 50 returned.

 1. Document ID: US 6578042 B2

L1: Entry 1 of 50

File: USPT

Jun 10, 2003

US-PAT-NO: 6578042

DOCUMENT-IDENTIFIER: US 6578042 B2

TITLE: Method and apparatus for configuring a computer using scripting plug-in

DATE-ISSUED: June 10, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Arrouye; Yan	Cupertino	CA		
Comiskey; John	San Jose	CA		
Nebel; Christopher	Sunnyvale	CA		
Ford; Richard	Arlington	VA		
Guittet; Michel	Redmond	WA		
Li; Alice	Los Altos	CA		

US-CL-CURRENT: 707/102; 707/10, 709/220

ABSTRACT:

A method and apparatus for configuring a computer. One embodiment of the invention combines all of the prior art control panels related to networking into a consolidated Network Setup Control Panel. In addition, the invention provides for computer configuration by scripting. The configuration may be for a type of system setting or for network configurations and protocols. Through scripting, a computer may be configured locally or remotely on a network. One embodiment of the invention provides for a centralized database or Configuration Library consisting of collected data relating to available configuration settings. This database is not limited to configuration information and can be used as a general database containing information the user desires to store. To modify a configuration by scripting, the invention provides for a Scripting Interface consisting of a Scripting Server and Scripting Plug-In. The Scripting Server receives the script forwarded from a user or network administrator, parses the script and determines the appropriate Scripting Plug-In to forward the desired action to. The Scripting Plug-In receives the commands and executes the appropriate actions to modify the configuration as directed.

45 Claims, 12 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 11

 2. Document ID: US 6427063 B1

L1: Entry 2 of 50

File: USPT

Jul 30, 2002

US-PAT-NO: 6427063

DOCUMENT-IDENTIFIER: US 6427063 B1

TITLE: Agent based instruction system and method

DATE-ISSUED: July 30, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Cook; Donald A.	Jamaica Plain	MA		
Lukas; George	Brighton	MA		
Lukas; Andrew V.	Boulder	CO		
Padwa; David J.	Santa Fe	NM		

US-CL-CURRENT: 434/350; 434/118, 434/322, 434/336, 706/927

ABSTRACT:

This invention relates to a system and method for interactive, adaptive, and individualized computer assisted instruction. This invention includes an agent (108) for each student (101) which adapts to its student, and provides individualized guidance to the student and controls to the augmented computer assisted instructional materials. The instructional materials of this invention are augmented to communicate the student's performance and the material's pedagogical characteristics to the agent, and to receive control from the agent. In a preferred embodiment, the agent maintains data reflecting the student's pedagogic or cognitive characteristics in a protected and portable media in the personal control of the student. Preferably, the content of the communication between the agent and the materials conforms to specified interface standards, so that the agent acts independently of the content of the particular materials. Also preferably, the agent can project using various I/O modalities integrated engaging, lifelike display personna(e).

25 Claims, 14 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 14

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KMC](#) | [Draw Desc](#) | [Image](#) 3. Document ID: US 6256635 B1

L1: Entry 3 of 50

File: USPT

Jul 3, 2001

US-PAT-NO: 6256635

DOCUMENT-IDENTIFIER: US 6256635 B1

TITLE: Method and apparatus for configuring a computer using scripting

DATE-ISSUED: July 3, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Arrouye; Yan	Cupertino	CA		
Comiskey; John	San Jose	CA		
Nebel; Chris	Sunnyvale	CA		
Ford; Richard	Arlington	CA		
Guittet; Michel	Redmond	CA		
Li; Alice	Los Altos	CA		

US-CL-CURRENT: 707/102; 707/10, 707/200, 709/220, 709/223, 713/1, 717/115, 717/174

ABSTRACT:

A method and apparatus for configuring a computer. One embodiment of the invention combines all of the prior art control panels related to networking into a consolidated Network Setup Control Panel. In addition, the invention provides for computer configuration by scripting. The configuration may be for a type of system setting or for network configurations and protocols. Through scripting, a computer may be configured locally or remotely on a network. One embodiment of the invention provides for a centralized database or Configuration Library consisting of collected data relating to available configuration settings. This database is not limited to configuration information and can be used as a general database containing information the user desires to store. To modify a configuration by scripting, the invention provides for a Scripting Interface consisting of a Scripting Server and Scripting Plug-In. The Scripting Server receives the script forwarded from a user or network administrator, parses the script and determines the appropriate Scripting Plug-In to forward the desired action to. The Scripting Plug-In receives the commands and executes the appropriate actions to modify the configuration as directed.

44 Claims, 12 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 11

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KIND	Draw Desc	Image
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4. Document ID: US 6246669 B1

L1: Entry 4 of 50

File: USPT

Jun 12, 2001

US-PAT-NO: 6246669

DOCUMENT-IDENTIFIER: US 6246669 B1

TITLE: Method and system for optimizing connection set-up operations in a high speed digital network

DATE-ISSUED: June 12, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE ZIP CODE COUNTRY
Chevalier; Denis Jean Albert	La Colle sur Loup	FR
Bazot; Philippe Michel	Chemin de la Gaude Vence	FR
Maurel; Olivier	Le Cannet	FR
Levy-Abegnoli; Eric	Nice	FR
Bertin; Olivier	Eybens	FR
Nicolas; Laurent	Les Hameaux du Soleil	FR
Chobert; Jean-Paul	Villeneuve Loubet	FR
	Saint Jeannet	FR

US-CL-CURRENT: 370/238; 370/257, 370/400

ABSTRACT:

In a high speed digital network including access nodes and network nodes each having topology data bases, a method for optimizing the connection set-up operations required for connecting a calling end-user attached to a local access node to a destination user attached to a remote access node, via a conventional connection set-up operation. An Access Node Connection Table (ANCT) in each access node stores a list of every remote access node for which the local access node has at least one user connection. A field in the locate reply message is defined for the destination remote Access Node Topology Database (ANTDB) and remote ANTDB information is inserted prior to sending the reply message. Locate reply message reception is monitored by the local access node, and upon reception an entry is created for the received remote ANTDB information in the local access node unless the remote access node was already identified in the local access node. An optimal path is then selected and connection set up. The ANCT is then updated accordingly.

22 Claims, 14 Drawing figures

Exemplary Claim Number: 12

Number of Drawing Sheets: 13

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [KINIC](#) | [Draw. Desc](#) | [Image](#)

5. Document ID: US 6236989 B1

L1: Entry 5 of 50

File: USPT

May 22, 2001

US-PAT-NO: 6236989

DOCUMENT-IDENTIFIER: US 6236989 B1

TITLE: Network-based help architecture

DATE-ISSUED: May 22, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Mandyam; Sriram Srinivasan	Austin	TX		
Saxena; Shubhada	Austin	TX		

US-CL-CURRENT: 707/4; 709/102, 715/500

ABSTRACT:

A method and system for implementing a network-based help architecture for software applications that reside on a host data processing system. A help database that is designed to support a software application that resides on a data processing system is integrated with an advanced knowledge base utilizing a standardized data format. The advanced knowledge base resides in a computer network to which the data processing system is linked. Next, and in response to selecting a help request associated with the software application, the help request is automatically converted into a data format readable by the computer network. Finally, the help database is dynamically supplemented and updated utilizing the advanced knowledge base, such that, in response to the step of selecting a help request associated with the software application, seamless access is provided within the computer network to the help database and the advanced knowledge base.

17 Claims, 7 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 6

[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Sequences](#) [Attachments](#)[KIMC](#) [Drawn Desc](#) [Image](#) 6. Document ID: US 6202080 B1

L1: Entry 6 of 50

File: USPT

Mar 13, 2001

US-PAT-NO: 6202080

DOCUMENT-IDENTIFIER: US 6202080 B1

** See image for Certificate of Correction **

TITLE: Apparatus and method for computer job workload distribution

DATE-ISSUED: March 13, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Lu; James	Plano	TX		
Juan; Shao-Min	Plano	TX		
Asava; Anand	Plano	TX		

US-CL-CURRENT: 709/105; 709/219, 709/223

ABSTRACT:

A job distribution system implemented by a computer network having a plurality of nodes, each having a cross-mounted local directory. The job distribution system has a job balance object, a node-processing object, and an updatable node distribution table. The job distribution system is on a first node of the plurality of nodes. A node daemon object is on each of the plurality of nodes. The job balance object has access to the local directory of each remaining node. The updatable node distribution table has a plurality of distribution data structures which correspond to each of the remaining nodes, and are updated by the node daemon object with a job status value. With these objects, the job balance object distributes the plurality of jobs by averaging the job status value of each of the remaining nodes to distribute a plurality of the pending job requests.

16 Claims, 5 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 5

[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Sequences](#) [Attachments](#)[KIMC](#) [Drawn Desc](#) [Image](#) 7. Document ID: US RE37031 E

L1: Entry 7 of 50

File: USPT

Jan 30, 2001

US-PAT-NO: RE37031

DOCUMENT-IDENTIFIER: US RE37031 E

TITLE: Printer providing security for printout

DATE-ISSUED: January 30, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Nishiwaki; Hirofumi	Yokohama			JP

US-CL-CURRENT: 358/1.14; 271/298, 358/1.1

ABSTRACT:

A printer accepting print requests from a plurality of users comprising bins storing printout and locks each locking a corresponding one of the bins, wherein the printer locks one of the bins and delivers the printouts to that one of the bins.

30 Claims, 12 Drawing figures

Exemplary Claim Number: 25

Number of Drawing Sheets: 9

[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Sequences](#) [Attachments](#)

[KMD](#) [Draw Desc](#) [Image](#)

8. Document ID: US 6181715 B1

L1: Entry 8 of 50

File: USPT

Jan 30, 2001

US-PAT-NO: 6181715

DOCUMENT-IDENTIFIER: US 6181715 B1

TITLE: Method and system for providing emulated telephony over DSL

DATE-ISSUED: January 30, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Phillips; Bruce A.	Highlands Ranch	CO		
Kung; Darwei	Aurora	CO		
Fink; Richard H.	Aurora	CO		

US-CL-CURRENT: 370/493

ABSTRACT:

A method and system for providing telephony services utilizes an emulated telephony channel within an allocated portion of digital subscriber line bandwidth. The digital subscriber line connects to a packet switched network, and embodiments of the present invention derive telephony services over the digital subscriber line by utilizing a portion of the available bandwidth to emulate one or more telephony channels.

20 Claims, 4 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 2

[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Sequences](#) [Attachments](#)

[KMD](#) [Draw Desc](#) [Image](#)

9. Document ID: US 6175831 B1

L1: Entry 9 of 50

File: USPT

Jan 16, 2001

US-PAT-NO: 6175831

DOCUMENT-IDENTIFIER: US 6175831 B1

TITLE: Method and apparatus for constructing a networking database and system

DATE-ISSUED: January 16, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Weinreich; Andrew P.	New York	NY		
Salamon; Mark R.	New York	NY		
Zilberberg; Shoshana	New York	NY		
Berlyn; Nicole D.	New York	NY		
Mitchell; Leeann	New York	NY		
Rosen; Cliff	New York	NY		
Seifer; Adam	New York	NY		
Green; Justin	New York	NY		
Haber; David	Great Neck	NY		
Samuels; David	Atlantic Beach	NY		
Chibnik; Ron	New York	NY		
Clifford; Scott	East Moriches	NY		
Boddu; Chandrasekhar	Piscataway	NJ		

US-CL-CURRENT: 707/10; 707/103X, 707/104.1, 709/206

ABSTRACT:

A networking database containing a plurality of records for different individuals in which individuals are connected to one another in the database by defined relationships. Each individual has the opportunity to define the relationship which may be confirmed or denied. E-mail messaging and interactive communication between individuals and a database service provider provide a method of constructing the database. The method includes having a registered individual identify further individuals and define therewith a relationship. The further individuals then, in turn, establish their own defined relationships with still other individuals. The defined relationships are mutually defined.

36 Claims, 24 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 33

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Image
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HTML	Drawn Desc
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□ 10. Document ID: US 6147992 A

L1: Entry 10 of 50

File: USPT

Nov 14, 2000

US-PAT-NO: 6147992

DOCUMENT-IDENTIFIER: US 6147992 A

TITLE: Connectionless group addressing for directory services in high speed packet switching networks

DATE-ISSUED: November 14, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Giroir; Didier	Cagnes-sur-Mer			FR
Brue; Rachel A.	Kasson	MN		
Nilsen; Boerge	Billingstad			NO

US-CL-CURRENT: 370/390; 370/401

ABSTRACT:

The present invention relates to connectionless transmission in high speed packet switching networks, and in particular to a group addressing method and system for sending a datagram to one or a plurality of destination nodes and within these nodes for duplicating the datagram and to forward it to multiple end users. The claimed invention takes advantage of a specific data transfer mode called "Remote Access to Functional Addressing" allowing the sending of a datagram to a destination node and within said node, the duplication of said datagram for a transmission towards multiple destinations. By distributing, maintaining and using the required addressing information corresponding to these multiple destinations within the node, the claimed group addressing method and system reduce to a minimum, first, the overhead usually associated with multicast operations in connectionless services, and second, the required amount of manual resource definition as in a given node, only local end users of said node have to be manually defined (unless the connectionless protocol allows for some form of automatic discovery of local resources).

6 Claims, 4 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 4

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [KIMC](#) | [Drawn Desc](#) | [Image](#)

11. Document ID: US 6141687 A

L1: Entry 11 of 50

File: USPT

Oct 31, 2000

US-PAT-NO: 6141687

DOCUMENT-IDENTIFIER: US 6141687 A

TITLE: Using an authentication server to obtain dial-out information on a network

DATE-ISSUED: October 31, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Blair; Dana L.	Alpharetta	GA		

US-CL-CURRENT: 709/225; 709/223, 709/224, 713/200

ABSTRACT:

A method for using an authentication server to obtain dial-out information about a network including the steps of receiving a destination network address to the authentication server; obtaining a network number and a corresponding network mask from a database; applying said network mask to said destination network address and comparing the result to said network number; retrieving a profile corresponding to said network number and network mask from a database if said network number matches the result of applying said network mask to said destination network address; and repeating said obtaining, applying, and retrieving steps if said network number does not match the result of applying said network mask to said destination network

address.

27 Claims, 5 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 2

[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Sequences](#) [Attachments](#)

[KINIC](#) [Draw Desc](#) [Image](#)

12. Document ID: US 6118768 A

L1: Entry 12 of 50

File: USPT

Sep 12, 2000

US-PAT-NO: 6118768

DOCUMENT-IDENTIFIER: US 6118768 A

TITLE: Apparatus and methods for use therein for an ISDN LAN modem utilizing browser-based configuration with adaptation of network parameters

DATE-ISSUED: September 12, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Bhatia; Rajiv	Marlboro	NJ		
Zhang; Siuling C.	Stony Brook	NY		

US-CL-CURRENT: 370/254; 370/469, 709/222, 709/250

ABSTRACT:

Apparatus, and accompanying methods for use therein, for an ISDN LAN modem that is suited for small user environments and which contains an internal ISDN router having a self-contained network hub for inter-connecting multiple network devices, such as workstations, to each other through a local area network (LAN) and for permitting each of those devices to each gain access through the router to any one of a number of different remote networks. Advantageously, to facilitate and simplify its configuration, the LAN modem automatically adapts itself to a current network environment of a workstation connected thereto, via the LAN, and then communicates with that workstation through a browser executing thereat to obtain configuration information from a user situated at the workstation.

27 Claims, 50 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 41

[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Sequences](#) [Attachments](#)

[KINIC](#) [Draw Desc](#) [Image](#)

13. Document ID: US 6108686 A

L1: Entry 13 of 50

File: USPT

Aug 22, 2000

US-PAT-NO: 6108686

DOCUMENT-IDENTIFIER: US 6108686 A

TITLE: Agent-based on-line information retrieval and viewing system

DATE-ISSUED: August 22, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Williams, Jr.; Henry R.	New York	NY	10004	

US-CL-CURRENT: 709/202; 709/203, 709/217

ABSTRACT:

A Subject-specific Information Retrieval and Viewing System (SIRViS) enables multiple users of a local computer system to access information stored remotely on a wide area network. The SIRViS is designed to retrieve and display to a user information relating to a particular, predefined subject area. The SIRViS includes a graphical user interface including a control panel and a content viewer. The control panel enables each local user to define a unique set of search rules for locating information on the particular subject area stored in one or more remote databases across the network. The control panel provides each set of search rules to a search agent, which accesses content in the remote databases according to the search and stores the information in a local database, including maintaining the overall structure in which the data was stored in the remote database and associating retrieved information with particular sets of search rules. Any of the local users can use the content viewer to access and display information stored in the local database relating to the particular subject area and to that particular user. The local processing system may include multiple SIRViS, each of which is customized to retrieve and display information in a different subject area.

33 Claims, 6 Drawing figures

Exemplary Claim Number: 32

Number of Drawing Sheets: 6

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KIMC	Draw Desc	Image
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 14. Document ID: US 6108330 A

L1: Entry 14 of 50

File: USPT

Aug 22, 2000

US-PAT-NO: 6108330

DOCUMENT-IDENTIFIER: US 6108330 A

TITLE: Apparatus and methods for use therein for an ISDN LAN modem that selects among a plurality of DNS servers for responding to a DNS query

DATE-ISSUED: August 22, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Bhatia; Rajiv	Marlboro	NJ		
Zhang; Siuling C.	Stony Brook	NY		

US-CL-CURRENT: 370/352; 370/401

ABSTRACT:

Apparatus, and accompanying methods for use therein, for an ISDN LAN modem (300) (and various aspects thereof) that is particularly, though not exclusively, suited for small user environments and which contains an internal ISDN router (305) having a self-contained network hub (340) for inter-connecting multiple network devices, such as workstations (10), to each other through a local area network (LAN) and for permitting each of those devices to each gain access through the router to any one

of a number of different remote networks. Advantageously, to facilitate and simplify its configuration, the LAN modem automatically adapts itself to a current network environment of a workstation connected thereto, via the LAN, and then communicates with that workstation through a browser executing thereat to obtain configuration information from a user situated at the workstation. Additionally, the LAN modem, through use of a multi-tiered routing hierarchy including both destination- and source-based routing, accommodates several modalities of network communication not heretofore possible in a conventional router. Specifically, several different workstations can simultaneously communicate through the LAN modem with a common remote network (60) and share a single user account at a corresponding network service provider.

23 Claims, 51 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 41

[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Sequences](#) [Attachments](#)

[KuMC](#) [Draw. Desc](#) [Image](#)

15. Document ID: US 6094659 A

L1: Entry 15 of 50

File: USPT

Jul 25, 2000

US-PAT-NO: 6094659

DOCUMENT-IDENTIFIER: US 6094659 A

** See image for Certificate of Correction **

TITLE: Web server for use in a LAN modem

DATE-ISSUED: July 25, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Bhatia; Rajiv	Marlboro	NJ		

US-CL-CURRENT: 707/104.1; 379/93.14, 707/10

ABSTRACT:

Apparatus, and accompanying methods for use therein, for an ISDN LAN modem that is suited for small user environments and which contains an internal ISDN router having a self-contained network hub for inter-connecting multiple network devices, such as workstations, to each other through a local area network and for permitting each of those devices to each gain access through the router to any one of a number of different remote networks. The LAN modem includes an internal web server for autonomously constructing and downloading a web page, through dynamic selective insertion of predefined event-specific web page components into a web page template, to the workstation. The resulting page informs a user stationed at the workstation of a failure condition or other operational event that then occurred at the LAN modem. The specific page components inserted into the template are selected based on the particular failure condition or other operational event which occurred.

30 Claims, 50 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 41

[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Sequences](#) [Attachments](#)

[KuMC](#) [Draw. Desc](#) [Image](#)

16. Document ID: US 6088451 A

L1: Entry 16 of 50

File: USPT

Jul 11, 2000

US-PAT-NO: 6088451

DOCUMENT-IDENTIFIER: US 6088451 A

TITLE: Security system and method for network element access

DATE-ISSUED: July 11, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
He; Jingsha	Plano	TX		
Hall; Randle D.	Corinth	TX		

US-CL-CURRENT: 713/201; 380/255, 380/28, 709/227

ABSTRACT:

A system and method for securing access to network elements by user elements, wherein the network elements and the user elements are coupled to a network. A network security server coupled to the network, wherein the network security server provides network security mechanisms to control access to the network elements and protect network resources and information. The network security mechanisms include: an authentication server responsible for authentication of the network users to network elements, a credential server responsible for controlling the network user credentials or privileges, and a network element access server responsible for controlling of access to the network elements by the user elements. A registration database facilitates administration and management of access to the network by the user elements. The registration database stores user profiles and administrative information to enhance effectiveness of the network security mechanisms. Each of the user elements and the network elements includes a separate local access control means as an interface that is provided at each user element and operates in conjunction with the authentication server, the credential server, and the network element access server to facilitate secure communication of data over the network.

21 Claims, 10 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 9

[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Sequences](#) [Attachments](#)[KMC](#) [Drawn Desc](#) [Image](#) 17. Document ID: US 6073168 A

L1: Entry 17 of 50

File: USPT

Jun 6, 2000

US-PAT-NO: 6073168

DOCUMENT-IDENTIFIER: US 6073168 A

** See image for Certificate of Correction **

TITLE: Method for reducing delivery latency of an image or other secondary information associated with a file

DATE-ISSUED: June 6, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Mighdoll; Lee S.	San Francisco	CA		
Leak; Bruce A.	Palo Alto	CA		
Perlman; Stephen G.	Mountain View	CA		
Goldman; Phillip Y.	Los Altos	CA		

US-CL-CURRENT: 709/217; 707/10, 707/104.1, 707/9, 709/202, 709/203, 709/213, 709/227

ABSTRACT:

A method of providing a document to a client coupled to a server is provided. The server provides a number of Internet services to the client, including functioning as a caching proxy on behalf of the client for purposes of accessing the World Wide Web. The proxying server includes a persistent document database, which stores various attributes of all documents previously retrieved in response to a request from a client. When a Web document is retrieved from a remote server in response to a request from the client, the database is consulted and the stored information relating to the requested document is used by the server in transcoding the document. The document is transcoded for various purposes, including to circumvent bugs or quirks found in the document, to size the document for display on a television set, to improve transmission efficiency of the document, and to reduce latency. The transcoder makes use of the document database to perform these functions. The document database is also used for prefetching previously requested documents and images and for reducing latency when downloading images to the client.

13 Claims, 13 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 12

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC	Draw Desc	Image
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18. Document ID: US 6064723 A

L1: Entry 18 of 50

File: USPT

May 16, 2000

US-PAT-NO: 6064723

DOCUMENT-IDENTIFIER: US 6064723 A

TITLE: Network-based multimedia communications and directory system and method of operation

DATE-ISSUED: May 16, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Cohn; Robert S.	Saratoga	CA		
Vaudreuil; Gregory M.	Dallas	TX		
Schoeneberger; Carl F.	Dallas	TX		
Reece; David M.	Arlington	TX		
O'Neal; Carlton C.	Dallas	TX		
Kalbfleisch; Carl W.	Richardson	TX		
Whipple; Mark B.	Dallas	TX		
Swoopes; James R.	Plano	TX		
Huch; Alan T.	Dallas	TX		
Dimitroff; Michael P.	Dallas	TX		

US-CL-CURRENT: 379/88.14; 379/88.18, 379/93.24

ABSTRACT:

A communications system (10) is provided which comprises a plurality of network hubs (12), (14), and (16). Network hubs (12), (14), and (16) are interconnected through a communications network (18). The system (10) interconnects messaging systems (24), (26), (28), (30), (32), (34), (36), (40), (42) and (44) having disparate capabilities and using disparate communications protocols. The network hubs use numbers of connection processors (52) and (54) to interact with the messaging systems. A hub database (68) and message store (58) are used to store control information and messaging information within the network hubs. A network processor (60) is used to interact with other hubs within the communications system (10). A message router (72), connection manager (74), data replicator (76), and an administrative event manager (78) are used to control the operations of the hub in processing a message. A management server (64) and a event processor (70) are used by communications system (10) to manage the internal operations of each of the network hubs. The network center (37) contains a customer computer interface system (167) and an interactive voice response system (169) to allow user interaction with information provider databases (39), a customer service system (161), a message tracking system (163), a billing system (159), and a HelpLine system (157). The network center (37) contains a master database (151) that is used to synchronize the databases stored in each of the network hubs (12), (14), and (16).

8 Claims, 14 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 9

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#)

[K04C](#) | [Draw Desc](#) | [Image](#)

19. Document ID: US 6052803 A

L1: Entry 19 of 50

File: USPT

Apr 18, 2000

US-PAT-NO: 6052803

DOCUMENT-IDENTIFIER: US 6052803 A

TITLE: Key-based technique for assuring and maintaining integrity of firmware stored in both volatile and non-volatile memory

DATE-ISSUED: April 18, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Bhatia; Rajiv	Marlboro	NJ		
Elhindi; Tayseer M.	Ocean	NJ		
Sun; Matthew	Holmdel	NJ		

US-CL-CURRENT: 714/49

ABSTRACT:

Apparatus, and accompanying methods for use therein, for an ISDN LAN modem (300) (and various aspects thereof) that is particularly, though not exclusively, suited for small user environments and which contains an internal ISDN router (305) having a self-contained network hub (340) for inter-connecting multiple network devices, such as workstations (10), to each other through a local area network (LAN) and for permitting each of those devices to each gain access through the router to any one of a number of different remote networks. Advantageously, to facilitate and simplify its configuration, the LAN modem automatically adapts itself to a current network environment of a workstation connected thereto, via the LAN, and then communicates

with that workstation through a browser executing thereat to obtain configuration information from a user situated at the workstation. Additionally, the LAN modem, through use of a multi-tiered routing hierarchy including both destination- and source-based routing, accommodates several modalities of network communication not heretofore possible in a conventional router. Specifically, several different workstations can simultaneously communicate through the LAN modem with a common remote network (60) and share a single user account at a corresponding network service provider. Also, the LAN modem can simultaneously route packet traffic between multiple workstations on the LAN and different remote networks (60, 70) through different ISDN connections simultaneously existing between the LAN modem and corresponding network service providers.

25 Claims, 50 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 41

[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Sequences](#) [Attachments](#)

[RWD](#) [Draw. Desc](#) [Image](#)

20. Document ID: US 6031895 A

L1: Entry 20 of 50

File: USPT

Feb 29, 2000

US-PAT-NO: 6031895

DOCUMENT-IDENTIFIER: US 6031895 A

TITLE: Network-based multimedia communications and directory system and method of operation

DATE-ISSUED: February 29, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Cohn; Robert S.	Saratoga	CA		
Vaudreuil; Gregory M.	Dallas	TX		
Schoeneberger; Carl F.	Dallas	TX		
Reece; David M.	Arlington	TX		
O'Neal; Carlton C.	Dallas	TX		
Kalbfleisch; Carl W.	Richardson	TX		
Whipple; Mark B.	Dallas	TX		
Swoopes; James R.	Plano	TX		
Huch; Alan T.	Dallas	TX		
Dimitroff; Michael P.	Dallas	TX		

US-CL-CURRENT: 379/88.13; 379/88.11, 379/88.12, 379/88.21

ABSTRACT:

A communications system (10) is provided which comprises a plurality of network hubs (12), (14), and (16). Network hubs (12), (14), and (16) are interconnected through a communications network (18). The system (10) interconnects messaging systems (24), (26), (28), (30), (32), (34), (36), (40), (42) and (44) having disparate capabilities and using disparate communications protocols. The network hubs use numbers of connection processors (52) and (54) to interact with the messaging systems. A hub database (68) and message store (58) are used to store control information and messaging information within the network hubs. A network processor (60) is used to interact with other hubs within the communications system (10). A message router (72), connection manager (74), data replicator (76), and an administrative event manager (78) are used to control the operations of the hub in processing a message. A management server (64) and a event processor (70) are used

by communications system (10) to manage the internal operations of each of the network hubs. The network center (37) contains a customer computer interface system (167) and an interactive voice response system (169) to allow user interaction with information provider databases (39), a customer service system (161), a message tracking system (163), a billing system (159), and a HelpLine system (157). The network center (37) contains a master database (151) that is used to synchronize the databases stored in each of the network hubs (12), (14), and (16).

5 Claims, 14 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 9

[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Sequences](#) [Attachments](#)

[KIMC](#) [Draw Desc](#) [Image](#)

21. Document ID: US 6029203 A

L1: Entry 21 of 50

File: USPT

Feb 22, 2000

US-PAT-NO: 6029203

DOCUMENT-IDENTIFIER: US 6029203 A

TITLE: Apparatus and methods for use therein for an ISDN LAN modem that provides enhanced network activity

DATE-ISSUED: February 22, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Bhatia; Rajiv	Marlboro	NJ		
Douglas; C. Paul	Matawan	NJ		
Zhang; Siuling C.	Stony Brook	NY		

US-CL-CURRENT: 709/244; 709/217, 709/248

ABSTRACT:

Apparatus, and accompanying methods for use therein, for an ISDN LAN modem that is suited for small user environments and which contains an internal ISDN router having a self-contained network hub for inter-connecting multiple network devices, such as workstations, to each other through a local area network (LAN) and for permitting each of those devices to each gain access through the router to any one of a number of different remote networks. Through use of a multi-tiered routing hierarchy including both destination- and source-based routing, the LAN modem accommodates several modalities of network communication not heretofore possible in a conventional router. Specifically, several different workstations can simultaneously communicate through the LAN modem with a common remote network and share a single user account at a corresponding network service provider. Also, the LAN modem can simultaneously route packet traffic between multiple workstations on the LAN and different remote networks through different ISDN connections simultaneously existing between the LAN modem and corresponding network service providers.

44 Claims, 50 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 41

[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Sequences](#) [Attachments](#)

[KIMC](#) [Draw Desc](#) [Image](#)

22. Document ID: US 6028848 A

L1: Entry 22 of 50

File: USPT

Feb 22, 2000

US-PAT-NO: 6028848

DOCUMENT-IDENTIFIER: US 6028848 A

TITLE: Apparatus and methods for use therein for an ISDN LAN modem utilizing internal DNS and DHCP servers for transparent translation of local host names to IP addresses

DATE-ISSUED: February 22, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Bhatia; Rajiv	Marlboro	NJ		
Elhindi; Tayseer M.	Ocean	NJ		
Zhang; Siuling C.	Stony Brook	NY		

US-CL-CURRENT: 370/257; 370/401, 370/475

ABSTRACT:

Apparatus, and accompanying methods for use therein, for an ISDN LAN modem (300) (and various aspects thereof) that is particularly, though not exclusively, suited for small user environments and which contains an internal ISDN router (305) having a self-contained network hub (340) for inter-connecting multiple network devices, such as workstations (10), to each other through a local area network (LAN) and for permitting each of those devices to each gain access through the router to any one of a number of different remote networks. Advantageously, to facilitate and simplify its configuration, the LAN modem automatically adapts itself to a current network environment of a workstation connected thereto, via the LAN, and then communicates with that workstation through a browser executing thereat to obtain configuration information from a user situated at the workstation. Additionally, the LAN modem, through use of a multi-tiered routing hierarchy including both destination- and source-based routing, accommodates several modalities of network communication not heretofore possible in a conventional router. Specifically, several different workstations can simultaneously communicate through the LAN modem with a common remote network (60) and share a single user account at a corresponding network service provider.

28 Claims, 59 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 41

[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Sequences](#) [Attachments](#)[KMC](#) [Drawn Desc](#) [Image](#) 23. Document ID: US 6023724 A

L1: Entry 23 of 50

File: USPT

Feb 8, 2000

US-PAT-NO: 6023724

DOCUMENT-IDENTIFIER: US 6023724 A

TITLE: Apparatus and methods for use therein for an ISDN LAN modem that displays fault information to local hosts through interception of host DNS request messages

DATE-ISSUED: February 8, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Bhatia; Rajiv	Marlboro	NJ		
Stypko; Gregory H.	Jackson	NJ		
Zhang; Siuling C.	Stony Brook	NY		

US-CL-CURRENT: 709/218; 709/219, 709/224, 709/225, 709/237

ABSTRACT:

Apparatus, and accompanying methods for use therein, for an ISDN LAN modem that is suited for small user environments and which contains an internal ISDN router having a self-contained network hub for inter-connecting multiple network devices, such as workstations, to each other through a local area network and for permitting each of those devices to each gain access through the router to any one of a number of different remote networks. The LAN modem communicates network failure messages to a host workstation connected to the LAN by intercepting and responding to various DNS (domain name system) messages issued by that workstation and intended for a remote DNS server. Specifically, the LAN modem supplies its own network (IP) address in response to these messages, thus assuming a role of both a remote DNS server and a remote web server in order to implement a mechanism through which a fault-specific web page can be dynamically constructed and downloaded to the workstation for subsequent display, through a browser executing thereat. The page, once rendered, provides a specific message pertinent to the failure.

20 Claims, 50 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 41

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments

KnigC | Drawn Descr | Image

24. Document ID: US 5983176 A

L1: Entry 24 of 50

File: USPT

Nov 9, 1999

US-PAT-NO: 5983176

DOCUMENT-IDENTIFIER: US 5983176 A

TITLE: Evaluation of media content in media files

DATE-ISSUED: November 9, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Hoffert; Eric M.	San Francisco	CA		
Cremin; Karl	Mt. View	CA		
Degen; Leo	Petaluma	CA		

US-CL-CURRENT: 704/233; 704/231, 704/236

ABSTRACT:

A method and apparatus for searching for multimedia files in a distributed database and for displaying results of the search based on the context and content of the multimedia files.

15 Claims, 17 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 17

25. Document ID: US 5982856 A

L1: Entry 25 of 50

File: USPT

Nov 9, 1999

US-PAT-NO: 5982856

DOCUMENT-IDENTIFIER: US 5982856 A

TITLE: Network-based multimedia communications and directory system and method of operation

DATE-ISSUED: November 9, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Cohn; Robert S.	Saratoga	CA		
Vaudreuil; Gregory M.	Dallas	TX		
Schoeneberger; Carl F.	Dallas	TX		
Reece; David M.	Arlington	TX		
O'Neal; Carlton C.	Dallas	TX		
Kalbfleisch; Carl W.	Richardson	TX		
Whipple; Mark B.	Dallas	TX		
Swoopes; James R.	Plano	TX		
Huch; Alan T.	Dallas	TX		
Dimitroff; Michael P.	Dallas	TX		

US-CL-CURRENT: 379/88.06; 379/88.14, 707/104.1

ABSTRACT:

A communications system (10) is provided which comprises a plurality of network hubs (12), (14), and (16). Network hubs (12), (14), and (16) are interconnected through a communications network (18). The system (10) interconnects messaging systems (24), (26), (28), (30), (32), (34), (36), (40), (42) and (44) having disparate capabilities and using disparate communications protocols. The network hubs use numbers of connection processors (52) and (54) to interact with the messaging systems. A hub database (68) and message store (58) are used to store control information and messaging information within the network hubs. A network processor (60) is used to interact with other hubs within the communications system (10). A message router (72), connection manager (74), data replicator (76), and an administrative event manager (78) are used to control the operations of the hub in processing a message. A management server (64) and a event processor (70) are used by communications system (10) to manage the internal operations of each of the network hubs. The network center (37) contains a customer computer interface system (167) and an interactive voice response system (169) to allow user interaction with information provider databases (39), a customer service system (161), a message tracking system (163), a billing system (159), and a HelpLine system (157). The network center (37) contains a master database (151) that is used to synchronize the databases stored in each of the network hubs (12), (14), and (16).

2 Claims, 14 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 9

26. Document ID: US 5940824 A

L1: Entry 26 of 50

File: USPT

Aug 17, 1999

US-PAT-NO: 5940824

DOCUMENT-IDENTIFIER: US 5940824 A

** See image for Certificate of Correction **

TITLE: Information processing apparatus and method

DATE-ISSUED: August 17, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Takahashi; Koji	Chigasaki			JP

US-CL-CURRENT: 707/6

ABSTRACT:

A plurality of compressed data obtained by information-compressing a plurality of data by a discrete cosine transform (DCT) are stored in a main image file. When a retrieval instruction is applied, data serving as a data retrieval key is extracted from an image database, and the extracted data is DCT-compressed by a compression processing unit. Using DC components of the resultant compressed data, reference data are generated. A search unit collates the reference data with the DC component data of the compressed data stored in the main image file and extracts data on the basis of this collation result. With this arrangement, in retrieving desired data from a plurality of data groups stored in the information-compressed state, data collation processing can be performed in the information-compressed state.

50 Claims, 13 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 12

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	RIMC	Drawn Desc	Image
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 27. Document ID: US 5940478 A

L1: Entry 27 of 50

File: USPT

Aug 17, 1999

US-PAT-NO: 5940478

DOCUMENT-IDENTIFIER: US 5940478 A

TITLE: Method and system for extended addressing plans

DATE-ISSUED: August 17, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Vaudreuil; Gregory M.	Dallas	TX		
Schoeneberger; Carl F.	Dallas	TX		

US-CL-CURRENT: 379/88.18; 379/17, 379/221.11

ABSTRACT:

Communications system (10) that includes a network hub system (12), (14) and (16) connectable to external voice messaging systems (24), (26), (28), (30), (32), (34), (36), (40), (42) and (44). The network hub system (12), (14) and (16) includes a database storage (68) operable to store a telephone-based address and a globally unique address for the users of the communications system (10). The database storage (68) is also operable to store an address type for the external voice messaging systems (24), (26), (28), (30), (32), (34), (36), (40), (42) and (44).

15 Claims, 20 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 12

[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Sequences](#) [Attachments](#)

[Print](#) [Draw Desc](#) [Image](#)

28. Document ID: US 5918013 A

L1: Entry 28 of 50

File: USPT

Jun 29, 1999

US-PAT-NO: 5918013

DOCUMENT-IDENTIFIER: US 5918013 A

** See image for Certificate of Correction **

TITLE: Method of transcoding documents in a network environment using a proxy server

DATE-ISSUED: June 29, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Mighdoll; Lee S.	San Francisco	CA		
Leak; Bruce A.	Palo Alto	CA		
Perlman; Stephen G.	Mountain View	CA		
Goldman; Phillip Y.	Los Altos	CA		

US-CL-CURRENT: 709/217; 709/203, 709/219, 709/228, 709/229, 709/246, 713/201

ABSTRACT:

A method of providing a document to a client coupled to a server is provided. The server provides a number of Internet services to the client, including functioning as a caching proxy on behalf of the client for purposes of accessing the World Wide Web. The proxying server includes a persistent document database, which stores various attributes of all documents previously retrieved in response to a request from a client. When a Web document is retrieved from a remote server in response to a request from the client, the database is consulted and the stored information relating to the requested document is used by the server in transcoding the document. The document is transcoded for various purposes, including to circumvent bugs or quirks found in the document, to size the document for display on a television set, to improve transmission efficiency of the document, and to reduce latency. The transcoder makes use of the document database to perform these functions. The document database is also used for prefetching previously requested documents and images and for reducing latency when downloading images to the client.

13 Claims, 13 Drawing figures

Exemplary Claim Number: 7

Number of Drawing Sheets: 12

[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Sequences](#) [Attachments](#)

[Print](#) [Draw Desc](#) [Image](#)

29. Document ID: US 5903892 A

L1: Entry 29 of 50

File: USPT

May 11, 1999

US-PAT-NO: 5903892

DOCUMENT-IDENTIFIER: US 5903892 A

**** See image for Certificate of Correction ****

TITLE: Indexing of media content on a network

DATE-ISSUED: May 11, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Hoffert; Eric M.	San Francisco	CA		
Cremin; Karl	Mountain View	CA		
Ali; Adnan	London			CA
Smoot; Stephen R.	San Francisco	CA		

US-CL-CURRENT: 707/10; 345/716, 707/104.1, 707/2

ABSTRACT:

A method and apparatus for searching for multimedia files in a distributed database and for displaying results of the search based on the context and content of the multimedia files.

15 Claims, 17 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 17

[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Sequences](#) [Attachments](#)[KmtC](#) [Drawn Desc](#) [Image](#) 30. Document ID: US 5895461 A

L1: Entry 30 of 50

File: USPT

Apr 20, 1999

US-PAT-NO: 5895461

DOCUMENT-IDENTIFIER: US 5895461 A

**** See image for Certificate of Correction ****

TITLE: Method and system for automated data storage and retrieval with uniform addressing scheme

DATE-ISSUED: April 20, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
De La Huerga; Carlos	River Hills	WI		
Craig; William E.	San Antonio	TX		

US-CL-CURRENT: 707/1; 707/100, 707/104.1, 707/2, 707/200

ABSTRACT:

A computer system wherein data records are created, stored and retrieved from

predetermined addresses on a plurality of databases using a specialized word processor that recognizes keywords entered by the user and associates those keywords with the unique addresses of the data records to which they refer. Each data record created for storing on the system is automatically stored at a predetermined, unique address by a word processor according to keywords entered into the data record by a user. Users creating data records may reference other data records by the use of keywords which uniquely identify those other records. References to other data records cause a word processor to create hypertext links to those other data records so that users may retrieve them without knowing where they are stored on the computer system. The word processor monitors data input to a record by a user to determine when a keyword is being entered, and assists users in identifying correct keywords which point to the data records which they desire to retrieve or refer to.

60 Claims, 18 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 17

[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Sequences](#) [Attachments](#) [KMC](#) [Draw Desc](#) [Image](#)

31. Document ID: US 5878225 A

L1: Entry 31 of 50

File: USPT

Mar 2, 1999

US-PAT-NO: 5878225

DOCUMENT-IDENTIFIER: US 5878225 A

TITLE: Dual communication services interface for distributed transaction processing

DATE-ISSUED: March 2, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Bilansky; Mark Alan	Apalachin	NY		
Huang; Kevin Chuang-Chi	Endicott	NY		
Ryder; James William	Binghamton	NY		
Stavana; Edward James	Endicott	NY		

US-CL-CURRENT: 709/227; 370/469, 709/230

ABSTRACT:

A system and method is provided for communicating data and control information between two systems, each system including a communication protocol stack, such as an advanced program to program communication (APP) protocol stack which includes an I/O interface layer with modules for OPEN, GET, PUT, UPDATE, RELEASE, DELETE, CLOSE, and an OPC interface to a serial optical bus. Dual control and data paths are established from, for example, a client system to a single agent on a target system, the control path including a protocol stack and a data path avoiding at least one layer of the protocol stack. Packets of control information for a given process are transferred on the control path, and packets of data information are transferred on the data path. Communications are synchronized so that the client and target systems send and receive communications packets on the same one of the two paths.

14 Claims, 14 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 10

[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Sequences](#) [Attachments](#) [KMC](#) [Draw Desc](#) [Image](#)

32. Document ID: US 5870744 A

L1: Entry 32 of 50

File: USPT

Feb 9, 1999

US-PAT-NO: 5870744

DOCUMENT-IDENTIFIER: US 5870744 A

TITLE: Virtual people networking

DATE-ISSUED: February 9, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Sprague; David L.	Palo Alto	CA		

US-CL-CURRENT: 707/9; 345/970.1, 379/88.17, 707/10, 709/206, 709/229

ABSTRACT:

A virtual people networking allows multiple people working for the same organizational organization with similar interests to automatically interface with each other when any one of the people accesses any given one of multiple electronic sites provided through an intranet of the organization. A virtual people networking (VPN) module of the present invention is capable of residing in a storage element coupled to a processor running the VPN module in any one of the multiple systems interconnected within the electronic intra-organizational network. The VPN modules may also reside in a storage element coupled to a processor running the VPN module in a firewall system acting as a gateway between the organizational intranet and the Internet providing access to the World Wide Web (WWW).

36 Claims, 20 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 14

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMC	Draw Desc	Image
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 33. Document ID: US 5838909 A

L1: Entry 33 of 50

File: USPT

Nov 17, 1998

US-PAT-NO: 5838909

DOCUMENT-IDENTIFIER: US 5838909 A

TITLE: Reducing latency when synchronizing access to a multi-user database over a network

DATE-ISSUED: November 17, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Roy; H. Scott	San Francisco	CA		
Harvey; William D.	Palo Alto	CA		

US-CL-CURRENT: 709/209; 463/42

ABSTRACT:

A method and apparatus for reducing network latency during execution of a multiple-player game across a computer network are provided. A master database represents a world model for the game, and a master event server sequences user inputs, or events, for updating the master database. The master event server and the master database are initially located on a particular node in the network. Every other node that is used by a player in the game has a slave event server and a slave database. Slave event servers are responsible for updating their local slave database, sending events from their local node to the master event server, and forwarding events to and from other slave servers. In the method, a determination is made of which player in the game has a role in the game requiring the least latency of any role and which node in the network is being used by that player. The master event server and the master database are then migrated to that node by changing the status of the slave server of that node to that of master event server. Once the master event server has been migrated, other slave servers can establish a direct connection with the new master event server.

59 Claims, 15 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 15

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC	Draw. Desc	Image
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34. Document ID: US 5838903 A

L1: Entry 34 of 50

File: USPT

Nov 17, 1998

US-PAT-NO: 5838903

DOCUMENT-IDENTIFIER: US 5838903 A

TITLE: Configurable password integrity servers for use in a shared resource environment

DATE-ISSUED: November 17, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Blakely, III; George Robert	Austin	TX		
Milman; Ivan Matthew	Austin	TX		
Sigler; Wayne Dube	Austin	TX		

US-CL-CURRENT: 713/202; 709/220, 713/201

ABSTRACT:

A network system server that provides password composition checking for a plurality of clients is disclosed. The network system server includes a main data store, a security server, which is coupled to the main data store and the plurality of clients, a password synchronization server, which is coupled to the security server, a plurality of password strength servers, each of which is coupled to the password synchronization server, that provides password integrity among the plurality of clients so that each client maintains a password whose composition is consistent with the network server system. Each of the password strength servers is uniquely programmable with respect to performing password composition checking.

18 Claims, 12 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 12

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KIMC	Draw Desc	Image
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35. Document ID: US 5812639 A

L1: Entry 35 of 50

File: USPT

Sep 22, 1998

US-PAT-NO: 5812639

DOCUMENT-IDENTIFIER: US 5812639 A

TITLE: Message communication via common signaling channel

DATE-ISSUED: September 22, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Bartholomew; Dale L.	Vienna	VA		
Farris; Robert D.	Sterling	VA		

US-CL-CURRENT: 370/352; 379/100.08, 379/221.08, 379/230, 379/88.18

ABSTRACT:

A system and method of effecting transfer of message information of varied types from one centralized messaging system to another messaging device in a switched communications network having a plurality of central offices connected to subscriber terminals and connected together by trunks wherein the transfer of the message is effected through a common channel signaling network without using the trunks.

20 Claims, 18 Drawing figures

Exemplary Claim Number: 17

Number of Drawing Sheets: 17

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KIMC	Draw Desc	Image
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36. Document ID: US 5764890 A

L1: Entry 36 of 50

File: USPT

Jun 9, 1998

US-PAT-NO: 5764890

DOCUMENT-IDENTIFIER: US 5764890 A

TITLE: Method and system for adding a secure network server to an existing computer network

DATE-ISSUED: June 9, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Glasser; Daniel S.	Seattle	WA		
Reardon; Thomas R.	Seattle	WA		
Ogus; Aaron W.	Kirkland	WA		
McKelvie; Samuel J.	Bellevue	WA		
Joy; George	Redmond	WA		

US-CL-CURRENT: 713/202; 713/155

ABSTRACT:

A method and system for adding a secured network server to an existing network for access by a client thereof, wherein the added server does not possess a database of authentication credentials. The client is first authenticated for access to the added server by passing authentication requests received from the client to an authenticating agent having a database of authentication credentials, which may include information from a bindery comprising users, groups and passwords. The responses from the authenticating agent are then evaluated, and if the response indicates validity, the client is granted access to the added server. Database services are provided to the authenticated client by first evaluating database requests received from the client. Requests seeking information maintained by the authenticating agent are handled by passing the requests to the authenticating agent and using its response to reply to the client.

14 Claims, 30 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 18

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#)

[KWMC](#) | [Draw. Desc.](#) | [Image](#)

37. Document ID: US 5758077 A

L1: Entry 37 of 50

File: USPT

May 26, 1998

US-PAT-NO: 5758077

DOCUMENT-IDENTIFIER: US 5758077 A

TITLE: Service-centric monitoring system and method for monitoring of distributed services in a computing network

DATE-ISSUED: May 26, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Danahy; John J.	Canton	MA		
Kinney; Daryl F.	Hopkinton	MA		
Pulsinelli; Gary S.	Leominster	MA		
Rose; Lawrence J.	Chelmsford	MA		
Kumar; Navaneet	Malden	MA		

US-CL-CURRENT: 709/201; 709/203

ABSTRACT:

A distributed computer system service monitor provides information to a user regarding the status of services available on the computer system. The computer system includes plural host computers which act as servers and clients in connection with the services. The computer system is logically segregated into functional entities and sub-entities which define service regions and system layers. At least one host computer serves as the service monitor and includes a discovery function for passing a set of queries to other host computers and for using the responses (i) to identify functional entities and sub-entities served by each host computer and (ii) to determine whether each host computer acts as a server or a client or both and (iii) to determine the service or services performed or consumed by each host computer. The service monitor constructs a database which stores service information for each functional entity. The service information includes at least a list of host computers within the functional entity; services available in the functional entity; and whether each host computer acts as a server or a client for each service. The service monitor periodically interrogates each host computer in the functional

entity with a set of queries; records responses thereto and employs the responses to determine if a change in status of any of the services has occurred. If a change in status is determined, the change is indicated to the user. In addition, status changes are calculated for further system layers of functionality so as to determine the effect thereon of the status change.

14 Claims, 9 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 6

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [KIMAC](#) | [Drawn Desc](#) | [Image](#)

38. Document ID: US 5740231 A

L1: Entry 38 of 50

File: USPT

Apr 14, 1998

US-PAT-NO: 5740231

DOCUMENT-IDENTIFIER: US 5740231 A

TITLE: Network-based multimedia communications and directory system and method of operation

DATE-ISSUED: April 14, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Cohn; Robert S.	Saratoga	CA		
Vaudreuil; Gregory M.	Dallas	TX		
Schoeneberger; Carl F.	Dallas	TX		
Reece; David M.	Arlington	TX		
O'Neal; Carlton C.	Dallas	TX		
Kalbfleisch; Carl W.	Richardson	TX		
Whipple; Mark B.	Dallas	TX		
Swoopes; James R.	Plano	TX		
Huch; Alan T.	Dallas	TX		
Dimitroff; Michael P.	Dallas	TX		

US-CL-CURRENT: 379/88.22; 370/401, 370/407, 370/408, 370/425, 379/219, 379/93.01,
709/206

ABSTRACT:

A communications system (10) is provided which comprises a plurality of network hubs (12), (14), and (16). Network hubs (12), (14), and (16) are interconnected through a communications network (18). The system (10) interconnects messaging systems (24), (26), (28), (30), (32), (34), (36), (40), (42) and (44) having disparate capabilities and using disparate communications protocols. The network hubs use numbers of connection processors (52) and (54) to interact with the messaging systems. A hub database (68) and message store (58) are used to store control information and messaging information within the network hubs. A network processor (60) is used to interact with other hubs within the communications system (10). A message router (72), connection manager (74), data replicator (76), and an administrative event manager (78) are used to control the operations of the hub in processing a message. A management server (64) and a event processor (70) are used by communications system (10) to manage the internal operations of each of the network hubs. The network center (37) contains a customer computer interface system (167) and an interactive voice response system (169) to allow user interaction with information provider databases (39), a customer service system (161), a message tracking system (163), a billing system (159), and a HelpLine system (157). The

network center (37) contains a master database (151) that is used to synchronize the databases stored in each of the network hubs (12), (14), and (16).

56 Claims, 14 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 9

[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Sequences](#) [Attachments](#) [KWDIC](#) [Draw Desc](#) [Image](#)

39. Document ID: US 5727950 A

L1: Entry 39 of 50

File: USPT

Mar 17, 1998

US-PAT-NO: 5727950
DOCUMENT-IDENTIFIER: US 5727950 A

TITLE: Agent based instruction system and method

DATE-ISSUED: March 17, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE ZIP CODE	COUNTRY
Cook, deceased; Donald A.	late of Jamaica Plain	MA	
Lukas; George	Brighton	MA	
Lukas; Andrew V.	Boulder	CO	
Padwa; David J.	Santa Fe	NM	

US-CL-CURRENT: 434/350; 345/705, 345/733, 345/854, 345/978

ABSTRACT:

This invention relates to a system and method for interactive, adaptive, and individualized computer-assisted instruction. This invention includes an agent for each student which adapts to its student and provides individualized guidance to the student and controls to the augmented computer-assisted instructional materials. The instructional materials of this invention are augmented to communicate the student's performance and the material's pedagogical characteristics to the agent and to receive control from the agent. Preferably, the content of the communication between the agent and the materials conforms to specified interface standards so that the agent acts independently of the content of the particular materials. Also preferably, the agent can project using various I/O modalities integrated, engaging, life-like display persona(e) appropriate to the preferences of its student and appear as a virtual tutor to the student. Finally, preferably this invention is implemented on computers interconnected by a network so that instruction can be delivered to geographically distributed students from geographically distributed servers. An important application of this invention is delivering interactive, adaptive, and individualized homework to students in their homes and other locations.

151 Claims, 13 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 13

[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Sequences](#) [Attachments](#) [KWDIC](#) [Draw Desc](#) [Image](#)

40. Document ID: US 5689638 A

L1: Entry 40 of 50

File: USPT

Nov 18, 1997

US-PAT-NO: 5689638

DOCUMENT-IDENTIFIER: US 5689638 A

** See image for Certificate of Correction **

TITLE: Method for providing access to independent network resources by establishing connection using an application programming interface function call without prompting the user for authentication data

DATE-ISSUED: November 18, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Sadovsky; Vladimir	Kirkland	WA		

US-CL-CURRENT: 713/202; 707/9, 709/229, 713/155, 713/200

ABSTRACT:

A method and system for providing access to independent network resources. At system logon, logon data is stored in memory of a client computer. When a server is accessed, server authentication data is stored in a cache. System logon data and authorization data can be applied to access an independent server resource without requiring user interaction.

13 Claims, 4 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 4

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KIMC	Drawn Desc	Image
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 41. Document ID: US 5661782 A

L1: Entry 41 of 50

File: USPT

Aug 26, 1997

US-PAT-NO: 5661782

DOCUMENT-IDENTIFIER: US 5661782 A

** See image for Certificate of Correction **

TITLE: Voice mail communication with call blocking

DATE-ISSUED: August 26, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Bartholomew; Dale	Vienna	VA		
Farris; Robert D.	Sterling	VA		

US-CL-CURRENT: 379/88.18; 379/210.02, 379/216.01, 379/221.08, 379/230, 379/88.25

ABSTRACT:

A system and method of effecting transfer of a message such as a voice message from one centralized messaging system to multiple centralized messaging systems in a switched communications network having a plurality of central offices connected to subscriber terminals and connected together by trunks wherein the transfer of the message is effected through a common channel signaling network without using the

trunks.

33 Claims, 14 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 14

[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Sequences](#) [Attachments](#) [KWD](#) [Draw Desc](#) [Image](#)

42. Document ID: US 5602973 A

L1: Entry 42 of 50

File: USPT

Feb 11, 1997

US-PAT-NO: 5602973
DOCUMENT-IDENTIFIER: US 5602973 A

TITLE: Printer providing security for printout

DATE-ISSUED: February 11, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Nishiwaki; Hirofumi	Yokohama			JP

US-CL-CURRENT: 358/1.14; 271/298, 358/1.1

ABSTRACT:

A printer accepting print requests from a plurality of users comprising bins storing printout and locks each locking a corresponding one of the bins, wherein the printer locks one of the bins and delivers the printouts to that one of the bins.

10 Claims, 12 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 9

[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Sequences](#) [Attachments](#) [KWD](#) [Draw Desc](#) [Image](#)

43. Document ID: US 5598536 A

L1: Entry 43 of 50

File: USPT

Jan 28, 1997

US-PAT-NO: 5598536
DOCUMENT-IDENTIFIER: US 5598536 A

TITLE: Apparatus and method for providing remote users with the same unique IP address upon each network access

DATE-ISSUED: January 28, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Slaughter, III; Frank G.	Weston	MA		
Gocht; Russell C.	Bedford	MA		
McCool; David	Tewksbury	MA		

US-CL-CURRENT: 709/219; 379/93.02, 709/220, 709/228

ABSTRACT:

A remote access server provides a remote user with access to a local computer network. The server receives a user identification string from its communication port, the string having been entered by the remote user at a remote computer which is coupled to the communication port. The string identifies the remote user. The server uses the string to access a database and determine an internet protocol (IP) address associated with the string. The remote computer needs the IP address to communicate on the local computer network. The database includes a user identification string for each remote user and an IP address for each string. The remote access server sends the IP address to the remote computer via the communication port. The server then allows the remote computer to access the local computer network and to communicate on the local computer network using the IP address.

19 Claims, 4 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 2

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMPC	Draw. Desc	Image
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 44. Document ID: US 5550816 A

L1: Entry 44 of 50

File: USPT

Aug 27, 1996

US-PAT-NO: 5550816

DOCUMENT-IDENTIFIER: US 5550816 A

TITLE: Method and apparatus for virtual switching

DATE-ISSUED: August 27, 1996

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Hardwick; Ken	Sherwood	OR		
Stone; Geoffrey C.	Minneapolis	MN		

US-CL-CURRENT: 370/397; 370/401, 370/466, 709/100

ABSTRACT:

A physical switching device for use in a communication network to switch Open Systems Interconnection (OSI) network layer packets and method of use therefor is provided. The physical switching device includes at least a first and a second virtual switch. Each virtual switch includes a decision mechanism for determining an associated directive based on a destination identifier within a particular packet received at a data port. A processor is coupled to each virtual switch to insert the particular packet into an outgoing data stream on another data port to deliver the packet. Both data ports are associated with a plurality of data interfaces in the physical switching device. A management apparatus is coupled to each virtual switch to maintain information on an association between the plurality of data interfaces and the virtual switches. The management apparatus limits each processor to only inserting the particular packet on another data port associated with the same virtual switch which received the particular packet.

57 Claims, 41 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 35

[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Sequences](#) [Attachments](#)[KWD](#) [Draw Desc](#) [Image](#) 45. Document ID: US 5548726 A

L1: Entry 45 of 50

File: USPT

Aug 20, 1996

US-PAT-NO: 5548726

DOCUMENT-IDENTIFIER: US 5548726 A

TITLE: System for activating new service in client server network by reconfiguring the multilayer network protocol stack dynamically within the server node

DATE-ISSUED: August 20, 1996

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Pettus; Christopher E.	San Francisco	CA		

US-CL-CURRENT: 709/221; 709/203, 709/228, 709/230

ABSTRACT:

On a multi-node client server network, a client node obtains access to remote services by means of a communications directory service located in each node of the network. The communications directory service includes a tree structure to which existing directory services and other network services can be added. The tree structure has a plurality of nodes each of which includes specific methods that query and browse the associated directory service if such actions are supported by the underlying service. The communications directory service further includes shared libraries which store a service object associated with each service offered on the network. The service object, in turn, includes the service exchange address and communication link configuration information. A client desiring to access a remote service retrieves the appropriate service object from the communications directory service and uses the service object to set up the communications path.

19 Claims, 13 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 12

[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Sequences](#) [Attachments](#)[KWD](#) [Draw Desc](#) [Image](#) 46. Document ID: US 5479491 A

L1: Entry 46 of 50

File: USPT

Dec 26, 1995

US-PAT-NO: 5479491

DOCUMENT-IDENTIFIER: US 5479491 A

TITLE: Integrated voice-mail based voice and information processing system

DATE-ISSUED: December 26, 1995

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Herrero Garcia; Jose E.	Guaynabo			PR
Jimenez Rodriguez; Carlos R.	Guaynabo			PR

US-CL-CURRENT: 379/88.15; 379/100.08, 379/211.02, 379/88.01, 379/88.16, 379/88.24,
379/88.26, 379/93.24, 704/270.1

ABSTRACT:

An innovative "one-stop" full service telephone call/communications handling system combining voice mail, voice recognition, database handling and networking features into an integrated system provides highly cost effective solutions for even small organization and individual users. A voice mail system is programmed to automatically answer incoming telephone calls from incoming sources, and offers callers different options depending upon the number they call in on. Some incoming telephone lines are dedicated to particular services or types of callers, while other incoming lines provide a more general public interface for a variety of services offered by the system. The system of the present invention provides a more generalized interface offering callers a variety of different functions/operations/capabilities, including electronic yellow pages, long distance credit card calling services, voice mail and voice conversion, one-stop travel arrangements, and high quality voice mail audio prompts.

12 Claims, 19 Drawing figures

Exemplary Claim Number: 4

Number of Drawing Sheets: 19

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KIMC	Draw Desc	Image
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47. Document ID: US 5187735 A

L1: Entry 47 of 50

File: USPT

Feb 16, 1993

US-PAT-NO: 5187735

DOCUMENT-IDENTIFIER: US 5187735 A

TITLE: Integrated voice-mail based voice and information processing system

DATE-ISSUED: February 16, 1993

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Herrero Garcia; Jose E.	Guaynabo	PR		
Jimenez Rodriguez; Carlos R.	Guaynabo	PR		

US-CL-CURRENT: 379/88.17; 379/211.02, 379/212.01, 725/106, 725/118

ABSTRACT:

An innovative "one-stop" full service telephone call/communications handling system combining voice mail, voice recognition, database handling and networking features into an integrated system provides highly cost effective solutions for even small organization and individual users. A voice mail system is programmed to automatically answer incoming telephone calls from incoming sources, and offers callers different options depending upon the number they call in on. Some incoming telephone lines are dedicated to particular services or types of callers, while other incoming lines provide a more general public interface for a variety of services offered by the system. The system of the present invention provides a more generalized interface offering callers a variety of different

functions/operations/capabilities, including electronic yellow pages, long distance credit card calling services, voice mail and voice conversion, one-stop travel arrangements, and high quality voice mail audio prompts.

18 Claims, 19 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 19

[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Sequences](#) [Attachments](#) [KMC](#) [Draw Desc](#) [Image](#)

48. Document ID: US 4972367 A

L1: Entry 48 of 50

File: USPT

Nov 20, 1990

US-PAT-NO: 4972367

DOCUMENT-IDENTIFIER: US 4972367 A

**** See image for Certificate of Correction ****

TITLE: System for generating unsolicited messages on high-tier communication link in response to changed states at station-level computers

DATE-ISSUED: November 20, 1990

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Burke; Thomas J.	Chagrin Falls	OH		

US-CL-CURRENT: 707/10; 700/12, 700/9, 707/104.1, 707/201

ABSTRACT:

In a method for monitoring and collecting data in a multi-tier computer system, a database operation message, referred to as an "open" message is transmitted to a database cache computer with a list of data items in the database cache computer to be monitored on a change-of-state basis. The database cache computer responds by monitoring the data items and returning unsolicited "change data" messages containing only states for data items which have changed over the monitoring period. The change data messages are sent back periodically without the need for polling by a higher-level computer. The monitoring process is terminated by closing data records in the higher-level computer which generates a "close" message to the database computer to terminate the transmission of the change data messages. Also disclosed is a database cache computer and a user interface computer for carrying out the method.

11 Claims, 20 Drawing figures
Exemplary Claim Number: 7
Number of Drawing Sheets: 16

[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Sequences](#) [Attachments](#) [KMC](#) [Draw Desc](#) [Image](#)

49. Document ID: US 4866758 A

L1: Entry 49 of 50

File: USPT

Sep 12, 1989

US-PAT-NO: 4866758

DOCUMENT-IDENTIFIER: US 4866758 A

TITLE: Phone management server for use with a personal computer LAN

DATE-ISSUED: September 12, 1989

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Heinzelmann; Karl A.	Aberdeen	NJ		

US-CL-CURRENT: 379/93.15; 370/467, 379/247, 379/269, 379/93.23

ABSTRACT:

The present invention relates to a technique for providing phone management (PM) services to personal computers (PCs) which are end users of a PC-only Local Area Network (LAN) by logically associating voice terminals of a separate voice and data Network, e.g., a Private Branch Exchange (PBX), with the PCs. To provide the PM services, a PM server device is provided as an interface between the PC and PBX Networks onto which are bridged appearances of the logically associated voice terminals. The PM server device includes hardware and PM server application software that perform routing and translations between (1) PM messages of the PC-LAN which use a first PM signaling protocol, and (2) PM messages of the PBX which use a second signaling protocol. Each end user PC of the PC-LAN that is logically associated with a voice terminal on a PBX network includes PM user application software that provides a PM user interface and terminates the first PM signaling protocol. Typical PM services that can be performed at the PC are displaying calling/called party identification, retrieving and displaying messages on the PC screen, and placing voice calls from a PC-based directory.

5 Claims, 4 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 3

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KINIC	Draw. Desc	Image
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50. Document ID: US 4831582 A

L1: Entry 50 of 50

File: USPT

May 16, 1989

US-PAT-NO: 4831582

DOCUMENT-IDENTIFIER: US 4831582 A

** See image for Certificate of Correction **

TITLE: Database access machine for factory automation network

DATE-ISSUED: May 16, 1989

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Miller; William L.	Chagrin Falls	OH		
Horton; Robert E.	Hudson	OH		
Hayward; Peter J.	Hudson	OH		

US-CL-CURRENT: 707/104.1; 700/5, 700/9, 707/101, 707/9

ABSTRACT:

A cell controlling computer is interfaced to a group of station-level computers through an access machine which stores a database of data that is continually being updated from the station-level computers in response to conditions on machines and

industrial process equipment. The access machine communicates with the station-level computers using messages addressed to each respective station. The access machine communicates with the cell controlling computer through database operations messages that allow data to be communicated for many stations at once. During on-line reconfiguration, new data items in the station-level computers can be added to the database in the access machine using other database operations messages.

13 Claims, 23 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 18

[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Sequences](#) [Attachments](#)

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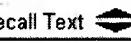
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<u>L9</u>	707/9	1658	<u>L9</u>
<u>L8</u>	707/8	1669	<u>L8</u>
<u>L7</u>	707/7	1213	<u>L7</u>
<u>L6</u>	707/6	2004	<u>L6</u>
<u>L5</u>	707/5	2429	<u>L5</u>
<u>L4</u>	707/4	3077	<u>L4</u>
<u>L3</u>	707/3	4398	<u>L3</u>
<u>L2</u>	707/2	3283	<u>L2</u>
<u>L1</u>	((707/1)!.CCLS.)	1438	<u>L1</u>

END OF SEARCH HISTORY